

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference E-1949/03	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/EP 03/51004	International filing date (day/month/year) 15.12.2003	Priority date (day/month/year) 16.12.2002
International Patent Classification (IPC) or both national classification and IPC A24C5/18		
Applicant G.D SOCIETA' PER AZIONI et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
- ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
- These annexes consist of a total of 3 sheets.

## 3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the International application

Date of submission of the demand  09.07.2004	Date of completion of this report  17.11.2004
Name and mailing address of the International preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Pille, S Telephone No. +49 89 2399-2097 

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/EP 03/51004**

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

2-5, 7                                      as originally filed  
1, 6                                        received on 03.11.2004 with letter of 25.10.2004

**Claims, Numbers**

4 (part), 5-10                            as originally filed  
1-3, 4 (part)                            received on 03.11.2004 with letter of 25.10.2004

**Drawings, Sheets**

1/2-2/2                                    as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language:    , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description,            pages:  
☐ the claims,                Nos.:  
☐ the drawings,             sheets:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. . PCT/EP 03/51004

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-10
	No: Claims	
Inventive step (IS)	Yes: Claims	1-10
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

2. Citations and explanations

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/EP 03/51004

The present invention solves the problem of effecting a product change on a cigarette making machine without stopping the machine.

None of the cited documents teaches or suggests such a method performed by the steps of claim 1, see acknowledgment on p. 1, l. 13-17.

REPLACED BY  
ART 34 AMDT

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PRODUCT CHANGE METHOD FOR A CIGARETTE MANUFACTURING  
MACHINE10 TECHNICAL FIELD

The present invention relates to a product change method for a cigarette manufacturing machine.

BACKGROUND ART

On cigarette manufacturing machines; product changes  
15 are normally made by stopping the machine and clearing the various compartments of the machine either by hand or using external suction devices.

Which operations obviously involve relatively long machine stoppages and the use of skilled labour.

20 DISCLOSURE OF INVENTION

It is an object of the present invention to provide a product change method for a cigarette manufacturing machine, designed to eliminate the aforementioned drawback.

25 More specifically, it is an object of the present invention to provide a method of effecting a product change on a cigarette manufacturing machine substantially without stopping the machine.

REPLACED BY  
ART 3A AND F

point, suction along suction conduit 10 is cut off.

At the same time (Figure 3), deflecting member 28 is moved into the lowered work position to direct the remaining bead 19 of shredded tobacco 3a, without relative paper strip 22, into waste bin 31. This operation continues (Figure 4) until manufacturing machine 1 is cleared completely, which may optionally be perfected automatically using compressed air jets in known manner not shown.

At this point, with the machine in the same configuration described above, but with suction restored along suction conduit 10, valve 12b is opened to feed shredded tobacco 3b directly into input hopper 2 (input hopper 2 is empty to begin with, so that plate 7 is kept in the vertical open position by level sensor 9) and afterwards only into box 5. By means of successive loads of shredded tobacco 3b, manufacturing machine 1 is filled completely with tobacco 3b to form a bead 19, which is fed, without relative paper strip 22, along forming table 20 and directed by intercepting device 27 into waste bin 31. Only when the correct compactness of bead 19 of shredded tobacco 3b is achieved, are conveyors 14 and 25 stopped and then started again, after feeding paper strip 22 along forming table 20, to form a new type of continuous cigarette rod 21, a first portion of which is again directed by intercepting device 27 into waste bin 30. Finally, deflecting member 28 is restored to the raised rest position to permit normal production of the

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ART 34 AMDT

## CLAIMS

1) A product change method for a cigarette manufacturing machine, wherein an input hopper (2) receives a first type (3a) of shredded tobacco from a supply header (4), and feeds it to at least one channel (17) for forming a bead (19) of tobacco, which is released onto a paper strip (22) travelling along a forming table (20) for forming a continuous cigarette rod (21); the method comprising the steps of cutting off supply of said first type (3a) of tobacco to said manufacturing machine (1); unloading the first type (3a) of shredded tobacco from the manufacturing machine (1) to form a waste stream (31) of shredded tobacco of the first type (3a); and feeding a second type (3b) of shredded tobacco through the supply header (4) and the input hopper (2) until the manufacturing machine (1) is completely full.

2) A method as claimed in Claim 1, wherein unloading the first type (3a) of tobacco comprises the step of arresting said paper strip (22).

3) A method as claimed in Claim 2, and comprising the further step of only starting up supply of said paper strip (22) when the manufacturing machine (1) is filled completely with said second type (3b) of shredded tobacco.

4) A method as claimed in any one of Claims 1 to 3, wherein the first type (3a) of tobacco is unloaded by